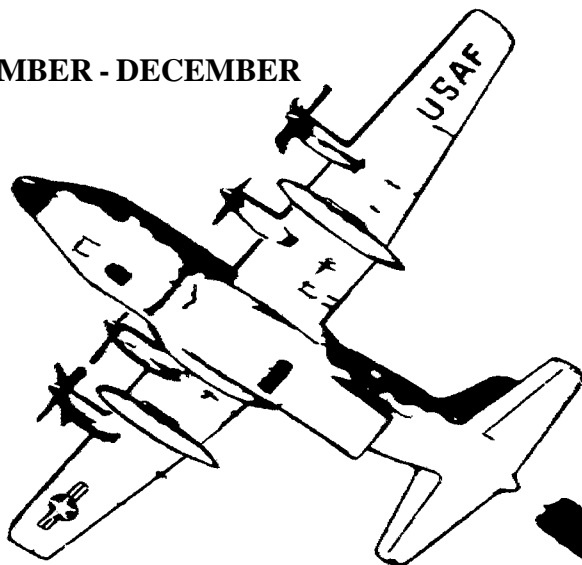


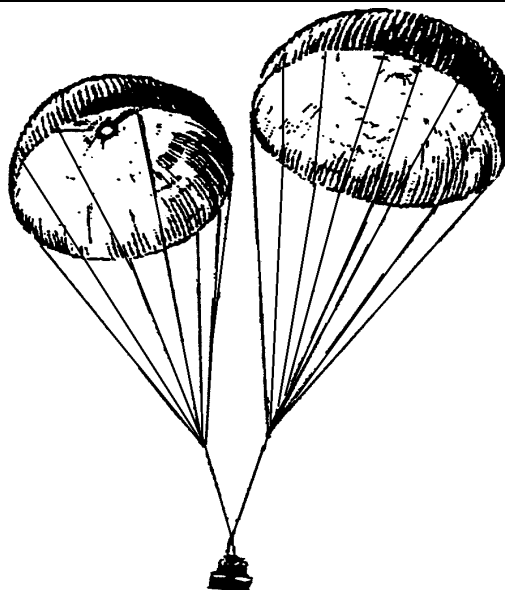
SEPTEMBER - DECEMBER

VOLUME III 1997



TRIENNIAL

**AIRDROP REVIEW  
AND  
MALFUNCTION/SAFETY  
ANALYSIS**



PREPARED BY  
THE US ARMY QUARTERMASTER SCHOOL  
FORT LEE, VIRGINIA 23801-1502

## AIRBORNE CREED

*I am an Airborne trooper! A paratrooper!*

*I jump by parachute from any plane in flight. I volunteered to do it, knowing well the hazards of my choice.*

*I serve in a mighty Airborne Force—famed for deeds in war—renowned for readiness in peace. It is my pledge to uphold its honor and prestige in all I am—in all I do.*

*I am an elite trooper—a sky trooper—a shock trooper—a spearhead trooper. I blaze the way to far-flung goals—behind, before, above the foe's front line.*

*I know that I may have to fight without support for days on end. Therefore, I keep mind and body always fit to do my part in any airborne task. I am self-reliant and unafraid. I shoot true, and march fast and far. I fight hard and excel in every art and artifice of war.*

*I never fail a fellow trooper. I cherish as a sacred trust the lives of men with whom I serve. Leaders have my fullest loyalty, and those I lead never find me lacking.*

*I have pride in the Airborne! I never let it down!*

*In peace, I do not shirk the dullest duty nor protest the toughest training. My weapons and equipment are always combat ready. I am neat of dress—military in courtesy—proper in conduct and behavior.*

*In battle, I fear no foe's ability, nor underestimate his prowess, power and guile. I fight him with all my might and skill—ever alert to evade capture or escape a trap. I never surrender, though I be the last.*

*My goal in peace or war is to succeed in any mission of the day—or die, if needs be, in the try.*

*I belong to a proud and glorious team—the Airborne, the Army, my Country. I am its chosen pride to fight where others may not go—to serve them well until the final victory.*

*I am a trooper of the sky! I am my Nation's best!  
In peace and war I never fail. Anywhere, anytime, in anything—  
I am AIRBORNE!*

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**PREFACE**

**The airdrop review and malfunction/safety analysis is published by the US Army Quartermaster School in hopes that by “passing the word” the malfunction rate within the Armed Forces may be minimized. The review and analysis in this issue covers the period 1 September 1997 - 31 December 1997.**

**POC AND MAILING ADDRESS**

**The POC for Airdrop Malfunction Reports, Monthly Airdrop Summary Reports, and any other information concerning the Airdrop Review and Malfunction/Safety Analysis is Mr. Roger Hale. All correspondence for the above reports and analysis should be addressed to:**

**AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT  
ATTN MR ROGER HALE  
USA QUARTERMASTER CENTER AND SCHOOL  
1010 SHOP ROAD  
FORT LEE VA 23801-1502**

**CHANGE OF ADDRESS**

**To change your mailing address, please send the mailing label along with your new address to:**

**AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT  
ATTN MR ROGER HALE  
USA QUARTERMASTER CENTER AND SCHOOL  
1010 SHOP ROAD  
FORT LEE VA 23801-1502**

## REPORTS AND ANALYSES

The Malfunction Review Board met at Fort Lee, Virginia on 25 - 26 February 1998. A breakdown of the areas in which malfunctions occurred from 1 September through 31 December 1997 follows:

<u>CATEGORY</u>	<u>QUANTITY</u>
Containers/CRRC	14
Platforms	
LVAD	8
Personnel	13

All DD Forms 1748-2 (Airdrop Malfunction Report (Personnel-Cargo)) are reviewed, and any identifying information is removed. Block 24 is annotated to include both Army and Air Force references if only one is given. No grammatical editing is done to the reports.

**CARGO MALFUNCTION REPORTS AND ANALYSIS**

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 700 AGL	10. ACFT SPEED (Knots) 125 Knots	11. DZ ELEVATION (Feet) 15 Feet	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  Containers	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		<input type="checkbox"/> DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER  CDS	27. TYPE PARACHUTE AND NUMBER  (1) G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  68-Inch Pilot	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  1 of 2 FS 630
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  The malfunction occurred on a day training mission dropping a single stick of a two-bundle CDS rigged with a single guillotine knife. Both loads exited the aircraft as normal. Load one streamed in. It was evident that neither the 68-inch pilot or G-12E parachutes deployed. The load impacted the ground destroying the skidboard and training load.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Upon investigation, it was discovered that the bottom bag closing loop was mis-routed through the L-Bar connector. The 68-inch pilot parachute bag closing tie was correct and the pilot parachute was attached to the G-12E correctly. Due to the cotton bag closing loop being through the L-Bar connector, all the weight and stress was placed on the cotton loop instead of the closing tie which caused the malfunction. The cause of the malfunction was rigger error. The rigger did not follow the proper procedures as stated in TM 10-1670-281-23&P or FM 10-500-3.				

CONTINUED ON NEXT PAGE

**ANALYSIS: 1**

**WHAT WAS THE MALFUNCTION?**

Parachute did not deploy.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Parachute was not packed correctly. The bag closing tie was misrouted through the L-bar connector link.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper rigging procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 311	12. SURFACE WINDS (Knots) 5	13. VISIBILITY (Feet/Miles) 5 SM

III. CARGO					
23. TYPE LOAD AND WEIGHT  CDS X 5 4837	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED			
		DUAL RAIL	<input checked="" type="checkbox"/>	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 5		
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  26 HV	28. SIZE EXTRACTION/RELEASE PARACHUTE  NA	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  FS 617	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  This malfunction occurred on a 5 bundle CDS mass drop. At green light, the bundles exited normally. The third bundle out had its parachute fail to inflate. Inspection of the parachute revealed that all ties were broken and the probable cause was air starvation. Damage to the bundle was minimal.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  The second bundle out was fully inflated; probable cause was air starvation.					

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**ANALYSIS: 2**

**WHAT WAS THE MALFUNCTION?**

Parachute failed to inflate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Air starvation.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

NA

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) NA	12. SURFACE WINDS (Knots) 2	13. VISIBILITY (Feet/Miles) Clear/7

III. CARGO				
23. TYPE LOAD AND WEIGHT  A-22 Container 1850 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS N/A	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  68-Inch Pilot	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  Center
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The CDS bundle exited the aircraft normally. During deployment, the suspension lines elongated but the canopy failed to inflate, causing total destruction of the sandbox-training load.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the load and canopy on the ground revealed that the suspension lines were twisted from 5 feet above the connector links to the lower lateral band. All suspension lines and canopy ties were broken. After a full inspection at our shop, the following discrepancies were noted: Left Riser Group - Burns on all plys from edge to edge 3/4-inch in width. Lines 7, 8, 10, 14, 17, 18, 19, 20, 21, 24, 26, 27, 28, 30, 34, 37, 40, 45, 46, 51, 52, 54, 56, and 60 all have burns 25 and 30 feet below the lateral band. Line 23 is burned from connector link to lower lateral band. Line 3 was broken. The canopy had one hole, gore 7 section 5. The centering line was measured at 53 feet 8 inches. Date of manufacture on the canopy is Dec 69. The malfunction is believed to have been caused by a combination of line 3 having been routed around the risers, possibly during rigging/transportation, and the short centering line causing the apex to extend into the suspension lines.				

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**ANALYSIS: 3**

**WHAT WAS THE MALFUNCTION?**

Parachute failed to inflate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Centerline was only 53 feet 8 inches instead of 57 feet.
2. Parachute not properly laid out.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Follow proper packing procedures according to TO
2. Find a method to properly measure centerline.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 372	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 5 SM

III. CARGO					
23. TYPE LOAD AND WEIGHT  CDS/930	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED			
		DUAL RAIL	<input checked="" type="checkbox"/>	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1		
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  26 Foot HV	28. SIZE EXTRACTION/RELEASE PARACHUTE  NA	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  FS 530	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  This malfunction occurred on a single CDS, non CVR. At green light, the left hand retriever ran for 3 seconds but the gate failed to cut. The retriever did not break the 80 lb cotton safety tie on the knife. No damage or injury.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Maintenance inspected the retriever and found that the clutch was out of adjustment causing it to slip when a load was applied. Clutch was adjusted IAW TO 1C-130H-2-25 SG-001.					

CONTINUED ON NEXT PAGE

**ANALYSIS: 4**

**WHAT WAS THE MALFUNCTION?**

Retriever did not break the safety tie on knife.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Aircraft equipment failure.
2. Clutch out of adjustment (Western Gear).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Clutch was adjusted.
2. Western gear is continuing problem.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 705 FT	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 304 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS Tng Load 1340 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		<input type="checkbox"/> DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS N/A	NO. CONTAINERS 1	Non-CVR Non-Breakaway S/L
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  1-G12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  N/A	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  FS 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  Static line retriever engaged for 1.5 seconds at green light. The 80 lb safety tie and release gate were not cut. The load failed to exit. Emergency procedures were initiated with no damage to the load or aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Post mission inspection of the static line retriever resulted with no discrepancies noted. The static line retriever tested satisfactory, cutting the 80 lb safety tie and type 26 nylon release gate. The exact cause of the malfunction could not be determined.				

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**ANALYSIS: 5**

**WHAT WAS THE MALFUNCTION?**

1. Safety tie and release gate were not cut.
2. Load did not exit.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Aircraft equipment failure (winch).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Implement more stringent inspection procedures are followed (brake test).

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 400 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 335 ASL	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) Clear

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1320 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11 FM 10-529/ TO 13C7-10-171	25. AERIAL DELIVERY SYSTEM USED		
		<input type="checkbox"/> DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)  Non-CVR Single Stick
		NO. PLATFORMS	NO. CONTAINERS 7	
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  1 X G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  68-Inch Pilot	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  FSN 458 3 of 7
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>This load contained replicated TOW rounds. It was the fifth load to exit the aircraft. When load exited, the pilot parachute fluttered above the load and did not pull the G-12E off the load. The load was destroyed. The pilot parachute had one suspension line torn from the lower portion of the canopy. About 60 percent of the canopy was torn (almost shredded) and had several burn marks. No damage was found on any of the D-bags from that aircraft. The G-12 D-bag seams were ripped with canopy exposed and about 15 feet of suspension lines were pulled out. The G-12 separated from the load, probably on impact.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The cause was that the pilot parachute failed to inflate, therefore, the G-12E never came off the load. My conclusion is that the pilot parachute came in contact with another load (probably the one following it) which caused the damage to the pilot parachute and prevented it from inflating.</p>				

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**ANALYSIS: 6**

**WHAT WAS THE MALFUNCTION?**

1. 68-inch pilot parachute was destroyed and could not deploy the G-12.
2. Block 31 says fifth load to exit.
3. Block 30 says position 3 of 7.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Possible material failure (amount of use at JRTC).
2. Possible entanglement with the load.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper rigging procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 400 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 335 ASL	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) Clear

III. CARGO					
23. TYPE LOAD AND WEIGHT  CDS 875 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11 FM 10-550 TO 13C7-22-71	25. AERIAL DELIVERY SYSTEM USED			
		DUAL RAIL	<input checked="" type="checkbox"/>	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 4	Non-CVR Single Stick	
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  1 X G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  68-Inch Pilot	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  FSN 488 2 of 4	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  This load contained replicated stinger rounds. It was the third load to exit the aircraft. After the load exited, the G-12E was not pulled off the load. Because it was dark, I could not tell if the pilot parachute had inflated. The load was destroyed. At the impact site, the G-12 was off the load with about 20 feet of suspension lines out. The pilot parachute was lying next to the load with the deployment line wrapped around the load and caught on one corner. Inspection of the pilot parachute revealed no damage. The deployment line had several burn marks where it apparently came in contact with the A-22 container. It did not appear that the load had rolled over the deployment line on impact.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  The pilot parachute failed to pull the G-12 off the load. While exiting, the load must have tumbled prior to the G-12 coming off the load. This caused the deployment line to wrap around the load rendering the pilot parachute useless.					

CONTINUED ON NEXT PAGE

**ANALYSIS: 7**

**WHAT WAS THE MALFUNCTION?**

68-inch pilot parachute did not deploy the G-12.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Possible load tumble causing the parachute to entangle with the load.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Determine if single or double A-22 containers.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 425	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 435	12. SURFACE WINDS (Knots) 8 Knots at 260	13. VISIBILITY (Feet/Miles) 15 MILES

III. CARGO				
23. TYPE LOAD AND WEIGHT  A-22 CDS 1050 lbs	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS NA	NO. CONTAINERS 1	Non CVR Non Breakaway
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  NA	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  FS 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  Static line retriever engaged for 1 second at green light. 80 pound safety tie and type 26 nylon release gate were not cut. Load failed to exit plane. Emergency procedures were initiated with no damage to load or aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Post mission inspection of static line retriever was retested. The static line retriever was engaged. The micro switch on the winch activated after one second. The spring cup was dislodged from its track. The spring was bent. Maintenance performed a further investigation on the winch. There was indication of a worn cup and tract. The winch was impounded, PQDR/MDR, and sent to the company for product rework. Waiting for the results from the company. The winch was replaced on the aircraft. All winches were inspected on all aircraft. This winch seems to be an isolated incident.				

CONTINUED ON NEXT PAGE

**ANALYSIS: 8**

**WHAT WAS THE MALFUNCTION?**

1. Safety tie and release gate were not cut.
2. Load did not exit.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Aircraft equipment failure (winch).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Implement more stringent inspection procedure (brake test).

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1424 Feet MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+ Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1591 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE  68 Inch Pilot Parachute	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  Gate F.S. 521 Pulley F.S. 530
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  At green light, the static line retriever winch operated for 3 seconds. At the same time the guillotine knife cut the gate, the suspend pulley separated from the pulley clevis. After the load exited the aircraft, the static line retriever cable was found separated from the quick-disconnect terminal which was still attached to the guillotine knife. The cable on the knife was bent and sustained broken wires.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  The quick-disconnect terminal caught on the A-22 container's excess webbing placing undue stress on the retriever cable allowing the quick-disconnect to open and release the cable. Once tension was removed from the cable following the gate cut, the retriever winch recoiled into the suspend pulley breaking the safety wire allowing it to come free of the pulley clevis.				

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**ANALYSIS: 9**

**WHAT WAS THE MALFUNCTION?**

Incident

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Angle below minimum with pulley and gate.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Gate should be rigged forward.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 372	12. SURFACE WINDS (Knots) 350/4	13. VISIBILITY (Feet/Miles) 7+

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS X 3 Total 3095	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	<input checked="" type="checkbox"/>	CDS RELEASE GATE
		NO. PLATFORMS	NO. CONTAINERS	OTHER (Explain)
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  26 HV	28. SIZE EXTRACTION/RELEASE PARACHUTE  N/A	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  FS 617
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) This was a 3-bundle CDS w/CVR, left stick, using the right static line retriever (Western Gear). The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) On the ground the retriever ran correctly until the cable got to the horizontal to slightly higher position. All preflight inspections were conducted correctly. Investigation revealed rewind limit switch was out of adjustment.				

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**ANALYSIS: 10**

**WHAT WAS THE MALFUNCTION?**

The static line retriever failed to cut the gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Western gear (brake tests) (recurring problem).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Brake test on Western gear.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1200 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1424 Feet MSL	12. SURFACE WINDS (Knots) 10 @ 90	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1591 lbs Water Barrel x 4	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 8	25. AERIAL DELIVERY SYSTEM USED		
		<input type="checkbox"/> DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE  68-Inch Pilot Parachute	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  Pulley F.S. 617 Gate F.S. 577
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.				

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**ANALYSIS: 11**

**WHAT WAS THE MALFUNCTION?**

Static line retriever failed to cut gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Static line retriever continuing problem or improper checklist procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Perform proper checklist procedures brake test on Western gear.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1173 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 1424 Feet MSL	12. SURFACE WINDS (Knots) 050 @ 5	13. VISIBILITY (Feet/Miles) 4 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1327 lbs Water Barrel x 4	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	<input checked="" type="checkbox"/>	CDS RELEASE GATE
		NO. PLATFORMS	NO. CONTAINERS	OTHER (Explain)
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE  68-Inch Pilot Parachute	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  Pulley F.S. 530 Gate F.S. 517
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  Upon green light, the right retriever winch activated for approximately 1/2 second. The 80 lb safety tie did not break and the gate failed to cut..				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  The beaded chains were within limitations and the compression spring was fully seated. Retriever timer was within limits during aircraft preflight. The malfunction was duplicated on the ground. It was later found that the retriever slip clutch was improperly adjusted causing it to slip upon any load placed on the cable.				

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**ANALYSIS: 12**

**WHAT WAS THE MALFUNCTION?**

Retriever did not break the safety tie.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Clutch out of adjustment (Western gear).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Recommend more testing on the Western gear.
2. Review data history on problems with Western gear.
3. QDR.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) 190/03	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS/ 1050 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	<input checked="" type="checkbox"/>	CDS RELEASE GATE
		NO. PLATFORMS	NO. CONTAINERS	OTHER (Explain)
26. TYPE PLATFORM/AIR-DROP CONTAINER  A-22	27. TYPE PARACHUTE AND NUMBER  26 HV	28. SIZE EXTRACTION/RELEASE PARACHUTE  N/A	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  FS 530
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  This malfunction occurred on a single CDS non-CVR. At green light, the left hand retriever ran for three seconds but the gate failed to cut. The retriever did not break 80 lb cotton safety tie on the knife. No damage or injury.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Maintenance inspected the retriever and found that the clutch was out of adjustment, causing it to slip when a load was applied. Clutch was adjusted IAW TO 1C-130H-2-25SG-001.				

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**ANALYSIS: 13**

**WHAT WAS THE MALFUNCTION?**

Retriever did not break the safety tie.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Clutch out of adjustment (Western Gear).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Recommend more testing on Western gear.
2. QDR (MDR) report to AMC
3. Review data history on problems with Western gear.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 475 Feet	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1420	12. SURFACE WINDS (Knots) 100/3	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS/w CVR	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	<input checked="" type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER  NA	27. TYPE PARACHUTE AND NUMBER  G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  NA	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  Bundles Double Stick @ FS 737
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  On a double stick CDS airdrop utilizing CVR procedures at green light, the left gate cut but the right gate failed to cut. The pulley location was at FS 617, with the bundles positioned at FS 737. The 80 lb safety tie broke on the release knife but the gate failed to cut. Gate failed to cut malfunction procedure was accomplished.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Suspected loose gate and the knives not being symmetrical causing slack on the right knife contributed to this malfunction. The retriever ran the full 3 seconds.				

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**ANALYSIS: 14**

**WHAT WAS THE MALFUNCTION?**

Right failed to cut

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Too much slack in gate (right).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper rigging procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130E	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SPEED (Knots) 140 Knots	11. DZ ELEVATION (Feet) 1424 Feet MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT  Heavy Equip- ment 3,150 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G-12E/2	28. SIZE EXTRACTION/RELEASE PARACHUTE  15 Foot	29. LENGTH OF REEFING LINE  Centerline/ 57 Feet	30. POSITION OF LOAD IN AIRCRAFT  F.S. 657
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  The load exited the aircraft normally. Upon exit the honeycomb separated from the top board. The suspension slings from the aft side of the load caught under the forward side of the load keeping the load in a vertical position. The two parachutes fully deployed, however, the load remained in a vertical position impacting the ground striking the latch assembly first.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  The deadman's safety tie was found loose on the forward side of the load. The other three sides were too tight. The safety tie caught on the underside of the topboard rotating the load enough to allow the aft suspension slings to catch under the forward side of the load.				

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**ANALYSIS: 15**

**WHAT WAS THE MALFUNCTION?**

Deadman's safety tie caught under the load causing aft suspension sling to catch on load.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Rigged improperly.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Eliminate all sharp edges/corners by properly padding.
2. Follow procedures for rigging mass supply load in TO 13C7-1-8.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1000 Feet AGL	10. ACFT SPEED (Knots) 140 Knots	11. DZ ELEVATION (Feet) 123 Feet	12. SURFACE WINDS (Knots) 0-3 Knots	13. VISIBILITY (Feet/Miles) Clear/98 Feet

III. CARGO				
23. TYPE LOAD AND WEIGHT  Mass Supply 7,625 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-512/ TO 13C7-1-8 FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)  Locks #7, 9, 10, 11
		NO. PLATFORMS  1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G-11B/2 Ea	28. SIZE EXTRACTION/RELEASE PARACHUTE  15-Foot Extr	29. LENGTH OF REEFING LINE  60 Foot	30. POSITION OF LOAD IN AIRCRAFT  Center Load/ 560
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The load exited the aircraft normally. The malfunction occurred during the deployment phase. The platform was in a 45 degree angle when the M-1 released the parachutes from the load. One of the parachutes had partially inflated and the other parachute elongated but never inflated. The load released at about 8000 feet AGL, and impacted on the DZ destroying the load and the platform.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The M-1 release timer failed to make the normal 12 to 16 second count and caused the parachute connectors to release from the M-1 at approximately 3 seconds into the deployment phase. The M-1 release was inspected and found that the stem plunger was damaged inside the block housing, causing the M-1 release timing block to fire prematurely during the extraction phase.</p>				

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**ANALYSIS: 16**

**WHAT WAS THE MALFUNCTION?**

Timer block malfunctioned.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Timer block prematurely retracted keys causing the block to fall, releasing parachute connectors causing the load to hit the ground
2. Note: Rigger/loadmaster noted timer keys did not look fully extended and used screwdriver to adjust and extend keys on aircraft.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Perform full functional check on the release prior to installing.
2. Follow proper in-plane guidelines. (The aircraft is not the place to be performing functional checks.)
3. M-1 should have been replaced.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 550 AGL	10. ACFT SPEED (Knots) 150 KIAS	11. DZ ELEVATION (Feet) 1163	12. SURFACE WINDS (Knots) 350/004	13. VISIBILITY (Feet/Miles) 12 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  3060	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE  15-Foot	29. LENGTH OF REEFING LINE  NA	30. POSITION OF LOAD IN AIRCRAFT  #1
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  At "Green Light" the extraction parachute released and the extraction line elongated in a normal manner. At this point the extraction parachute separated from the extraction line at the four point link. The crew initiated the malfunction checklist and cut the extraction over the drop zone.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  The cover plate for the four point link was never recovered. It appears the loadmaster failed to properly place the cover on the four point link and his mistake was not discovered during the Joint Airdrop Inspection.				

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**ANALYSIS: 17**

**WHAT WAS THE MALFUNCTION?**

The Type IV connector link separated from the extraction parachute.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

The loadmaster did not install the faceplate correctly and when the in-plane JAI was accomplished he failed to identify the deficiency.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Pay more attention to detail.
2. Follow -9 procedures.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1555 Feet AGL	10. ACFT SPEED (Knots) 500 Knots	11. DZ ELEVATION (Feet) 328 MSL	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) Restricted

III. CARGO				
23. TYPE LOAD AND WEIGHT  SEE 21949 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-539/ TO 13C7-1-17	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  24-Foot Type V	27. TYPE PARACHUTE AND NUMBER  G-11C/5 EA	28. SIZE EXTRACTION/RELEASE PARACHUTE  28 Foot Extraction	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  2 of 2
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The extraction parachute deployed and pulled the load from the aircraft. Secondly the load went into the recovery phase and two of the five parachutes deployed. The parachutes stayed with the load for a few seconds then the parachutes cut away from the load leaving the load with no lift capability. This caused the load to malfunction. The vehicle was completely destroyed.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The cause for this malfunction was that the 3 foot 2 loop deployment line for the left three parachutes was either missing or it broke during the deployment causing only two of the parachutes to deploy.</p>				

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**ANALYSIS: 18**

**WHAT WAS THE MALFUNCTION?**

3-foot cluster sling was not attached to the clustering clevis.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. The Malfunction NCO did not secure area immediately (last drop of day).
2. The extraction system was not found until the following day.
3. The extraction system (D-bags, extraction line parachute including where 3-foot sling should have been) was removed from DZ prior to investigation.
4. All material to include 3-foot sling not accounted for.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Emphasize “proper installation of 3-foot cluster sling” on load where deployment parachutes are not all stacked together.
2. Follow proper malfunction investigation procedures (secure area/equipment).

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141B	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1215 AGL	10. ACFT SPEED (Knots) 150 KCAS	11. DZ ELEVATION (Feet) 1175	12. SURFACE WINDS (Knots) 080/10	13. VISIBILITY (Feet/Miles) 7+NM

III. CARGO				
23. TYPE LOAD AND WEIGHT  Heavy/3160	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  (2) G-12E	28. SIZE EXTRACTION/RELEASE PARACHUTE  15-Foot	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT  STA 1260
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  At "Green Light", the extracton parachute exited and inflated normally. The platform remained in place. The loadmaster pulled the right hand release handle twice to try and release the platform. Prior to chaining the emergency aft restraint chains, the platform broke free and released. After closing the cargo doors, the loadmaster discovered four of the right hand locks became engaged and were damaged by the platform upon exiting.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Rail shop inspected the rail section and found nothing that would hinder the release of the platform. They also inspected the sheered locks and could not find a logical reason for them to drop back into the dual rail. Possible flexing of the aircraft or by pulling the release handle twice were discussed as a possible cause.				

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**ANALYSIS: 19**

**WHAT WAS THE MALFUNCTION?**

Right hand locks did not release.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Possible incorrect installation of the right hand locks by not ensuring control rod was seated correctly allowing locks to engage when pressure was applied.
2. Loadmaster failed to follow correct emergency procedures. It does not state to pull right hand cross overs twice.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure maintenance installs right hand locks correctly.
2. Make sure loadmaster follows -1 procedures for airdrop emergencies.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140 KIAS	11. DZ ELEVATION (Feet) 690 Feet	12. SURFACE WINDS (Knots) 210 @ 5	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  Heavy Equipment 2600 Lbs.	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-512/ TO 13C7-1-8 Chapter 11	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G12E/2	28. SIZE EXTRACTION/RELEASE PARACHUTE  15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT  F.S. 600
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  The load exited normally. The mishap parachute extended out of the bag and elongated, but never opened. The mishap parachute seemed to fall below the platform after an attempt to inflate. The load descended under one fully inflated parachute with no damage. On the mishap parachute, all 3-cord ties were broken, but the 1/4-inch cotton webbing tie at connector links was not. The parachute was checked for proper layout on the DZ.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  When the first G-12E opened, it air-starved the second parachute.				

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**ANALYSIS: 20**

**WHAT WAS THE MALFUNCTION?**

The G-12E failed to fully inflate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. The weight of the load could have been the problem with using two G-12Es.
2. The G-12E was packed in a G-12D bag.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Get new G-12E bags.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17A	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1001RA	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 265	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT  8-Foot Mass Supply	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  2 G-12's	28. SIZE EXTRACTION/RELEASE PARACHUTE  15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT  1 of 1
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At the release point checklist, the extraction parachute exited normally. After approximately 2 to 3 seconds it became evident that the parachute would not completely open. The canopy appeared to be partly opened and rotating at that time the right hand locks were released and the load exited the aircraft (very slowly). It was observed that the main recovery parachutes opened. The load landed 1205/12 20 yards off the DZ.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Inspection of the main extraction parachutes revealed the following: Small tear in the canopy. No twist in suspension slings. No evidence of burn marks on any location. All required ties were broken. Nothing unusual observed.</p> <p>CAUSE: Undetermined.</p>				

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**ANALYSIS: 21**

**WHAT WAS THE MALFUNCTION?**

The load landed off the DZ.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Slow exit.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Not given.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1100 AGL	10. ACFT SPEED (Knots) 138 Knots	11. DZ ELEVATION (Feet) 529 Feet	12. SURFACE WINDS (Knots) 4-7 Knots	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  HMMWV with Howitzer	24. RIGGED IAW (TM/TO/NAVAIR No.)  FM 10-519/ TO 13C7-10-31	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS NA	
26. TYPE PLATFORM/AIR-DROP CONTAINER  32-Foot Type V	27. TYPE PARACHUTE AND NUMBER  4 X G11C	28. SIZE EXTRACTION/RELEASE PARACHUTE  1 X 28	29. LENGTH OF REEFING LINE  N/A	30. POSITION OF LOAD IN AIRCRAFT
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  The load extracted from the aircraft normally. However, when all the parachutes were deploying only two parachutes fully deployed while one blew away from the load, and another caught air but not fully, which left the load with 2 x parachutes and a 1/2 of lift capability causing it to hit the ground hard. The riser extension broke during the deployment phase.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  After an investigation, we found that the 20 foot 21p riser extension had broken off during the deployment phase, causing the load to hit the ground hard. No damages to the howitzer, little damage done to the HMMWV. The damage to the HMMWV was when the fan shroud shifted after it landed hard.				

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**ANALYSIS: 22**

**WHAT WAS THE MALFUNCTION?**

Two G-11s did not inflate causing the load to not have the required lift capability.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

The 20-foot rister extension broke.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Pay more attention to detail.
2. Ensure every corner or sharp edge is padded/secured.
3. There really was not enough information.

**PERSONNEL MALFUNCTION REPORTS AND ANALYSES**

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 800 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 360 Feet	12. SURFACE WINDS (Knots) 0-3	13. VISIBILITY (Feet/Miles) 5+ Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LCE, Kevlar, M-1950 PRC 126 w/H250 Hand Set		16. JUMPER'S POSITION IN ACFT L22 Second Aircraft	
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS  30
	SEMI-INVERSION	INVERSION	<input checked="" type="checkbox"/> CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE  T-10 Reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  Suspected broken (L) knee		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This airborne operation involved three aircraft. As the jumpers exited the aircrafts, a jumper from the second aircraft (left door #22) went into a spin. His main parachute deployed but went into a cigarette roll. At about 150 feet, the jumper's reserve parachute deployed, causing him to land sustaining only minor injuries.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon completion of investigation, it was determined there were two causes for this malfunction; poor exit and improperly positioned item of equipment. After questioning the jumper, he revealed that he had a bad exit, and at his second point of performance, he noticed his main parachute in a cigarette roll configuration and deployed his reserve. The jumper landed before he noticed his reserve fully deployed. The jumper was jumping an exposed PRC-126 radio attached to the rear of his pistol belt. The H 250 Hand Set was attached to the front of his LCE. The jumper also jumped an M 1950 weapon case with an M-16 inside. The inspection of the jumper's main parachute revealed the H 250 Hand Set with the cord attached was entangled with all 30 suspension lines of the main parachute approximately 6 inches below the anti-inversion net. (CONT)

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**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

This caused the main parachute air channel to be locked not allowing it to deploy, but in effect streamer. The inspection of the reserve parachute revealed that the delayed full deployment of the reserve parachute can be attributed possibly to the reserve pilot parachute (still attached to the apex) entangled with the T-10 main parachute and H 250 Hand Set. The canopy of the reserve parachute was not entangled with the main parachute or any other object, yet the reserve pilot parachute was still attached to the apex of the reserve and not allowed to completely elongate. The resulting action was restricted reserve deployment.

**ANALYSIS: 23****WHAT WAS THE MALFUNCTION?**

Cigarette roll.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Improperly stored equipment.
2. Improperly rigged equipment (PRC-126 Hand Set).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Have a unit SOP (regarding equipment).
2. Will identify to Fort Benning about exposed items of equipment.

<b>I. GENERAL</b>					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Casa 212	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 ft AGL	10. ACFT SPEED (Knots) 110 Knots	11. DZ ELEVATION (Feet) 490 Feet MSL	12. SURFACE WINDS (Knots) 2 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
<b>II. PERSONNEL</b>					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ACFT 14th Out of 15 Ramp Exit	
17. TYPE PARACHUTE (Specify)  MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS  10
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Line Twist/ Hung Slider	
20. TYPE OF RESERVE  MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 12,500 feet and initiated ripcord pull at 4,000 feet AGL. Jumper checked for pilot parachute deployment and noticed the suspension lines were twisted and the slider had not come down. Jumper attempted to clear twists with no success. At 3,000 feet, the jumper initiated cut away procedures and landed on drop zone with good reserve.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After inspection of the main canopy, no damage or abnormalities were found. Jumper did not give adequate time to remove twists and cut away at 3,000 feet AGL. He had a good reserve and landed on the drop zone without further incident.

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**ANALYSIS: 24**

**WHAT WAS THE MALFUNCTION?**

Line over/hung slider.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Unstable body position at opening.
2. Improper packing procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Enforce closer supervision of packing procedures.
2. Ensure jumper has a stable body position prior to and through the entire pull sequence.

NOTE: The main canopy's toggles were still stowed upon recovery.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C 130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 12,500 ft AGL	10. ACFT SPEED (Knots) 120 Knots	11. DZ ELEVATION (Feet) 490 Feet MSL	12. SURFACE WINDS (Knots) 8 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4	16. JUMPER'S POSITION IN ACFT 3rd Jumper, Ramp Exit		
17. TYPE PARACHUTE (Specify)  MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS  12
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	See Item #32	
20. TYPE OF RESERVE  MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None		
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)					
<p>The jumper exited the aircraft at 12,500 feet and initiated ripcord pull at 4,000 feet AGL. After deployment, the jumper executed a controllability check and found the canopy uncontrollable. He then proceeded with cutaway procedures and landed on the drop zone.</p>					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)					
<p>After inspection of the main canopy, no damage or abnormalities were found. The jumper stated that he could not see his pilot parachute over the front or rear of the canopy, and that the tail was pulled up over the top. The instructor also viewed the tail of the canopy being pulled towards the bridle attachment point. It is my opinion that the bridle line was not cleared properly during the packing process. In turn, it wrapped around a portion of the tail during deployment pulling it forward. The cause of the malfunction is undetermined due to the fact that no canopy damage was found.</p>					

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**ANALYSIS: 25**

**WHAT WAS THE MALFUNCTION?**

Not enough information to determine cause of malfunction due to the lack of physical evidence.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper packing procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Increase supervision during packing procedures.

NOTE: Student was observed in air by the instructor, the instructor provided the statement.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 AGL	10. ACFT SPEED (Knots) 120 Knots	11. DZ ELEVATION (Feet) 490 MSL	12. SURFACE WINDS (Knots) 7 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Twin 53, MPU/12, Ruck Sack Weapon		16. JUMPER'S POSITION IN ACFT 5th Jumper/2nd Pass	
17. TYPE PARACHUTE (Specify)  MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS  17
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Twisted Risers	
20. TYPE OF RESERVE  MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 12,500 feet AGL stable without incident. At approximately 4,300 feet AGL, upon pull sequence jumper became unstable. As the canopy deployed, the jumper then flipped through his risers. Due to the unstable position, the jumper's risers twisted. The jumper then attempted to unstow his brakes, but failed to do so due to his twisted risers. Causing the canopy to be uncontrollable.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After 100 percent inspection of the MC4 main canopy, there was no damage found. Both toggles were still stowed, but the risers had twists in them. The jumper had stated he was unstable when he pulled his main ripcord. The instructor in the air observed the jumper drop his right shoulder on pull causing him to roll through his risers. Cause of the malfunction was unstable body position during pull sequence.

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**ANALYSIS: 26**

**WHAT WAS THE MALFUNCTION?**

There was no malfunction. It was an incident.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Unstable body position at pull altitude and during pull sequence.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Jumper needs to maintain stable body position at pull altitude and during pull sequence.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 Ft AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 480 Feet	12. SURFACE WINDS (Knots) 4 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4 Parachute System		16. JUMPER'S POSITION IN ACFT 5th Jumper of 12	
17. TYPE PARACHUTE (Specify)  MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS  29
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Premature Brake Release	
20. TYPE OF RESERVE  MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 12,500 feet AGL and deployed main canopy at 11,000 feet AGL. The jumper realized a left hand turn and hung slider and tries to clear slider but is unsuccessful. The jumper then performs cut-away procedure, is under a good reserve at 9,000 feet AGL and lands on the intended drop zone with no further injuries.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After 100 percent inspection of the main canopy, no damage or abnormalities were found. Left toggle was still stowed and right toggle was free causing canopy to turn left. Jumper thought he cleared his toggles but only cleared one. Malfunction was self induced. This should not be considered a malfunction.

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**ANALYSIS: 27**

**WHAT WAS THE MALFUNCTION?**

This was no malfunction. It was an incident.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Tumbling and spinning during pull sequence.
2. Unstable body position during pull sequence.
3. Improper post opening procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Place more emphasis on post opening procedures during prejump training.
2. Maintain stable body position at pull altitude and during pull sequence.

<b>I. GENERAL</b>					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 280	12. SURFACE WINDS (Knots) 6-8	13. VISIBILITY (Feet/Miles) 1500/2 Miles	
<b>II. PERSONNEL</b>					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER NONE		16. JUMPER'S POSITION IN ACFT Chalk #7 Left Door #1 Jumper	
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS  0
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31)  <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None		

**31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)**

Hole appeared in canopy during opening shock. Jumper did not deploy reserve and landed without injury. Inspection of canopy revealed gore 15 section 2 was torn from diagonal seam to diagonal seam and along entire length of #16 radial seam. No damage to radial tape. Anti-inversion net was torn from lines #4, 5, 8, 15, and 30.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

During the inspection of the canopy debris was found in the anti-inversion net and in the area of damage. Jumper landed in an area of the drop zone that was clear of debris ruling out the possibility that the debris was picked up on the drop zone after the jumper landed. The probable cause of the malfunction was that debris was not cleared from the canopy and subsequently packed in the canopy during repack.

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**ANALYSIS: 28**

**WHAT WAS THE MALFUNCTION?**

Blown section/anti-inversion net damage.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Improper shakeout procedures.
2. Improper pack inprocess inspection.
3. Packer inattention to detail.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Research the relationship of op temp with personnel needed to accomplish the mission.
2. Identify maintenance parachutes and remove from service.
3. Possible outsource from the Airdrop Systems Technician community. Go to the facility and observe.

<b>I. GENERAL</b>				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 10,000	10. ACFT SPEED (Knots) 125	11. DZ ELEVATION (Feet) 410	12. SURFACE WINDS (Knots) 2	13. VISIBILITY (Feet/Miles) Unlimited
<b>II. PERSONNEL</b>				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER DCU, Boots, Helmet, Gloves, Altimeter, Camelback		16. JUMPER'S POSITION IN ACFT Sixth
17. TYPE PARACHUTE (Specify)  MC-4	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	AR2 Activation
20. TYPE OF RESERVE  MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 10,000 feet AGL. The jumper was flat and stable when he felt something tapping his leg. His kit bag had come out but was not causing any problems during free fall. At 7,000 feet AGL, the jumper's AR2 fired activating the reserve canopy. The jumper landed on the DZ without further incident.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The AR2 was set on 2000 feet, the proper setting for the drop zone. The jumper stated that he did not arm his AR2 until told to do so in the aircraft at 6,000 feet AGL. The AR2 was tested in altitude test chamber upon return to the post and passed. The cause of the malfunction can not be determined at this time.

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**ANALYSIS: 29**

**WHAT WAS THE MALFUNCTION?**

Improper activation of the AR2.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Possible pressure difference caused by the flapping kit bag giving the AR2 a false reading.
2. Possible failure to recycle the AR2.
3. Wearing of non-standard equipment (camelback) could have caused the kit bag to become unsecure.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Relook how the jumper has kit bag configured and make sure it is IAW 31-19.
2. Ensure that jumpmasters have “positive” control when arming the AR2.
3. Look at the wearing of non-standard equipment.

<b>I. GENERAL</b>				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-23	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 12,500 Feet AGL	10. ACFT SPEED (Knots) 100	11. DZ ELEVATION (Feet) 700	12. SURFACE WINDS (Knots) 9-14	13. VISIBILITY (Feet/Miles) Unlimited
<b>II. PERSONNEL</b>				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Helmet, LBE, Ruck, Weapon, Goggles Gloves		16. JUMPER'S POSITION IN ACFT last of seven
17. TYPE PARACHUTE (Specify)  MC-4	18. TYPE MALFUNCTION			19. NO. JUMPS  65
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Cut-away
20. TYPE OF RESERVE  MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 12,500 feet. The jumper was experiencing a slow right hand turn at pull altitude. After opening, the jumper noticed his pilot parachute was wrapped around his left side control lines. The jumper performed a controllability check and determined the canopy uncontrollable and cut-away at 2,500 feet.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The jumper's right hand turning motion at pull altitude probably contributed to the pilot parachute becoming entangled with the control lines during opening. The right hand turning or spinning would have caused the pilot parachute to go to the left side of the canopy. The jumper needs to be in a good stable body position at opening.

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**ANALYSIS: 30**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute wrapped around the left side control lines.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper body position during pull sequence.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure and stress “stable body position during pull sequence”.

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Ft AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 313.5 feet	12. SURFACE WINDS (Knots) 1-2 Knots	13. VISIBILITY (Feet/Miles) Unrestricted
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Combat Equipment (Ruck and Weapon)		16. JUMPER'S POSITION IN ACFT Chalk 1 Right Door #11
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	19. NO. JUMPS Knot in canopy 1 ft below apex
20. TYPE OF RESERVE  T-10 Reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  N/A No injury sustained	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Knot in canopy. Approximately one (1) foot from apex. No damage incurred. Jumper did not descend faster than the other jumpers. No injury. Failure of canopy to fully deploy. Jumper had most of canopy deployed. Upon descent, it appeared to be a Mae West. However upon initial inspection was found not to be.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Improper packing procedures.

CONTINUED ON NEXT PAGE

**ANALYSIS: 31**

**WHAT WAS THE MALFUNCTION?**

Knot in canopy.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Possible improperly stowed canopy in the D-bag.
2. Possibly happened during deployment phase.
3. Inconclusive information.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Not enough information on the 1848-1 to draw any type of conclusion.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 ft AGL	10. ACFT SPEED (Knots) 150 Knots	11. DZ ELEVATION (Feet) 558	12. SURFACE WINDS (Knots) 8 Knots	13. VISIBILITY (Feet/Miles)	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER LCE, Weapons Case (100 mm) Lowering line, Kevlar		16. JUMPER'S POSITION IN ACFT 1st Chalk at Door Last Jumper	
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS  12
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE 24-Foot Troop Chest T-10 Reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Upon exiting from the aircraft, the jumper experienced violent twist in the suspension lines and risers. The jumper stated after all the twists were out he said his right canopy release assembly disconnected from his harness. The jumper activated his reserve. The jumper stated that he landed with main fluttering.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After talking with the jumper and reviewing the statements of the medics and other jumpers the following was found. First the jumper fell in the aircraft and the safety assisted him up and out the aircraft. The jumper stated that the twist in his risers forced his chin on his chest. After the jumper recovered, he said he felt the canopy jerk him hard to the left, so he activated his reserve. The jumper landed with no injuries. The jumper recovered all the equipment before the malfunction NCO arrived. After inspecting the main parachute, no deficiencies were found on either of the canopy releases. The reserve still had four and one half stows remaining in the packtray. I talked to other jumpers who stated that the jumper had a main canopy with the reserve fluttering in front of him. The jumper stated that he panicked after pulling his reserve. I believe the jumper panicked after having violent twist. Once he felt the hard jerk from the risers straightening out, he activated his reserve. However, if you have only one riser you will not have any lift capability and your reserve would have fully deployed.

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**ANALYSIS: 32**

**WHAT WAS THE MALFUNCTION?**

There was no malfunction. It was an incident.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Bad exit.
2. Jumper inexperience.
3. Condition of jumper.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

For safety reasons, the jumper should not have exited the aircraft on that pass.  
(Landslide effect resulted.)

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 AGL	10. ACFT SPEED (Knots) 135 Knots	11. DZ ELEVATION (Feet) 529 Feet	12. SURFACE WINDS (Knots) 4-7 Knots	13. VISIBILITY (Feet/Miles) 7 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Kevlar, LCE, Lowering Line, Weapons Case		16. JUMPER'S POSITION IN ACFT RT/33	
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS  16
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Entanglement	
20. TYPE OF RESERVE  T-10C	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31)  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		22. RESULTING INJURY  Neck, Back, and Head		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper had a poor exit, which caused twists. As jumper was recovering from twists, he became entangled with another jumper. As the jumper separated from the other jumper, the cover from the canopy release assembly came undone. Jumper pulled his reserve which also became entangled with his main parachute.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Because of the first jumper becoming entangled with the second jumper, the first jumper's suspension lines wrapped around the canopy release assembly causing it to open.

CONTINUED ON NEXT PAGE

**ANALYSIS: 33**

**WHAT WAS THE MALFUNCTION?**

There was no malfunction. It was an incident (entanglement).

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Jumper had a poor exit which caused a landslide effect of several problems.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reenforce the first and third points of performance during prejump. (The first being proper body position and the third keeping a sharp lookout for fellow jumpers during your entire descent.)

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 AGL	10. ACFT SPEED (Knots) 135	11. DZ ELEVATION (Feet) 274 Feet	12. SURFACE WINDS (Knots) 8-10 Knots	13. VISIBILITY (Feet/Miles) Clear
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Alice Pack, LCE M1950 Weapon Case		16. JUMPER'S POSITION IN ACFT L-6/R-9
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE  T-10 Res	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  Head and Back Injury Both Jumpers	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  Both jumpers exited the same aircraft from the left and right door. One jumper had a full canopy, the other did not have a canopy. The lower jumper caught the top of the parachute when it was passing him at approximately 650 to 700 feet. The jumper held the parachute until they reached the ground.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Both jumpers exited the aircraft from the left and door one of the jumper stole the air from the other jumper keeping the parachute from opening.				

CONTINUED ON NEXT PAGE

**ANALYSIS: 34****WHAT WAS THE MALFUNCTION?**

Cannot determine due to the fact that the jumper held on to the second jumper's canopy therefore not allowing his canopy to receive enough air to properly inflate (incident not a malfunction).

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Simultaneous exit.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Better control of the stick flow by the JM team.
2. Reinforce actions in the aircraft during prejump.

<b>I. GENERAL</b>				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1250	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 280	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Night
<b>II. PERSONNEL</b>				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER T-10C/Reserve/Combat		16. JUMPER'S POSITION IN ACFT Third
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION			19. NO. JUMPS  4
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE  24-Foot Chest Reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Upon exiting aircraft, the jumper looked up and saw a hole. He said he was falling faster than the other jumpers, so he pulled his reserve. Damage to the parachute. Suspension lines #12, 3, 14 broken. The following gores had burns on them: #16, 18, 30. Also sections were blown from gores #11, 12, 13, 14, 18, 22, 23, 28. Damage to the anti-inversion net also occurred on gores #5, 6, 14, 15, 28. Also the breakcord attaching loop was burned.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Net lock was the possible cause of malfunction. It occurred either by improper packing procedures or debris caught in the net. Actions taken, soldiers are following the proper packing procedures and ensuring all debris is removed from the net.

CONTINUED ON NEXT PAGE

**ANALYSIS: 35**

**WHAT WAS THE MALFUNCTION?**

1. Broken section.
2. Broken suspension lines.
3. Burns.
4. Damage to anti-inversion net.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Insufficient evidence:

1. No statements from the jumper(s).
2. A detailed TRI should have been included reflecting the damaged sections numbers, type of suspension line damage (detailed description).
3. No D-bag information.
4. No reserve inspection information.
5. No information on jumper's individual items of equipment.

The above information could have given us a focal point on the cause of damage.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Not enough information given.

**SUMMARY OF  
SUPPLY AND EQUIPMENT DROPS**

**3D TRIANNUAL CY 1997**

	<b>PLATFORM LOAD</b>		<b>SINGLE CONTAINER</b>		<b>CDS</b>		<b>LAPE</b>		<b>TOTAL</b>	
<b>Number of Drops</b>	<b>1123</b>		<b>576</b>		<b>1043</b>		<b>0</b>		<b>2742</b>	
<b>Number of Malfunctions</b>	<b>8</b>		<b>4</b>		<b>10</b>		<b>0</b>		<b>22</b>	
<b>Percentage of Malfunctions</b>	<b>0.071</b>		<b>0.070</b>		<b>0.094</b>		<b>0</b>		<b>0.080</b>	
<b>Malfunction Phases:</b>	<b>IP</b>	<b>EF</b>	<b>IP</b>	<b>EF</b>	<b>IP</b>	<b>EF</b>	<b>IP</b>	<b>EF</b>	<b>IP</b>	<b>EF</b>
<b>Extraction</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>7</b>
<b>Deployment-Recovery</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>7</b>
<b>Release</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

IP-Incorrect Procedures

EF-Equipment Failure

**SUMMARY OF  
PERSONNEL PARACHUTE JUMPS**

**3D TRIANNUAL CY 1997**

		<b>C-130</b>	<b>C-141</b>	<b>OTHER</b>	<b>TOTAL</b>
<b>Nonmaneuverable</b>	<b>Number of Deployments</b>	<b>31,864</b>	<b>18,179</b>	<b>4,763</b>	<b>54,806</b>
	<b>Number of Malfunctions</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>8</b>
	<b>Percentage of Malfunctions</b>	<b>0.018</b>	<b>0.011</b>	<b>0</b>	<b>0.014</b>
<b>Maneuverable</b>	<b>Number of Deployments</b>	<b>5,857</b>	<b>1,481</b>	<b>3,692</b>	<b>11,030</b>
	<b>Number of Malfunctions</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Percentage of Malfunctions</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Free-Fall</b>	<b>Number of Deployments</b>	<b>3,099</b>	<b>1,959</b>	<b>1,463</b>	<b>6,621</b>
	<b>Number of Malfunctions</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>6</b>
	<b>Percentage of Malfunctions</b>	<b>0.012</b>	<b>0</b>	<b>0.013</b>	<b>0.025</b>
<b>Total</b>	<b>Number of Deployments</b>	<b>40,820</b>	<b>21,619</b>	<b>9,918</b>	<b>72,457</b>
	<b>Number of Malfunctions</b>	<b>10</b>	<b>2</b>	<b>2</b>	<b>14</b>
	<b>Percentage of Malfunctions</b>	<b>0.024</b>	<b>0.092</b>	<b>0.020</b>	<b>0.011</b>

**SUMMARY OF  
PERSONNEL PARACHUTE MALFUNCTIONS**

**3D TRIANNUAL CY 1997**

	NON- MANUEVERABLE		MANUEVERABLE		FREE-FALL		RESERVE	
		*		*		*		*
Number of Deployments	54,806		11,030		6,621		3	
Number of Malfunctions	9		0		6		1	
Towed jumper	0		0		0		0	
Broken Static Line	0		0		0		0	
Entanglement	0		0		0		0	
Failed to Inflate	2	*	0		0		1	
Inversion	0		0		0		0	
Pilot Chute	0		0		1		0	
Semi-Inversion	0		0		0		0	
Suspension Lines	0		0		0		0	
Other	7	*	0		5		0	
Percentage of Malfunctions	0.164		0.000		0.009		0.3	
Fatalities	1	*	0		0		1	*

\*Injuries

**INJURIES OCCURRING ON PARACHUTE OPERATIONS  
AS REPORTED ON DA FORM 285**

**1 JULY - 30 SEPTEMBER 1997**

	C-130	C-141	UNKNOWN	TOTAL
PLF-Related Injuries	10	9	3	22
Main Malfunction	0	0	0	0
Misrouting of Static Line	0	0	0	0
Entanglements	2	0	0	2
Tree Landings	2	0	1	0
In Aircraft	2	0	0	2
Hazards on Drop Zone	0	0	0	0
Other	3	0	2	5
Insufficient Information	0	0	0	0

## AIRCRAFT MALFUNCTIONS

These malfunction reports are not included in the statistical data nor reflected in the percentage of malfunctions. All aircraft systems malfunctions which may have led to an abort or no-drop are constantly reviewed and analyzed for repeat or recurring trends and solutions. Corrective actions are recommended through Air Force maintenance systems.

PERSONNEL DROPS	
Improperly operating doors or ramps	0
Static line retriever	7
SUPPLY AND EQUIPMENT DROPS	
Rail locks	0
Improperly operating ADS	0
Improperly operating doors or ramps	0
Release mechanism	1
Electrical system	0
CONTAINER DROPS	
Rollers	0
Type XXVI gate	4
Static line retriever	4
TOTAL	9

## **HOT POOP**

### **CHANGE TO FM 10-519**

The following message was sent out to all units:

**190800Z FEB 98**

**UNCLAS**

**SUBJECT: CHANGE 2, FM 10-519/TO 13C7-10-31/FMFM 7-55, AIRDROP OF SUPPLIES AND EQUIPMENT: RIGGING 105-MILLIMETER HOWITZERS, DATED 23 DECEMBER 1992.**

- 1. ON PAGE 5-43, FIGURE 5-31 OF THE SUBJECT MANUAL, THE RIGGED LOAD DATA TABLE SHOWS THE HEIGHT OF THE LOAD TO BE 75 INCHES. THE HEIGHT SHOULD BE CHANGED TO READ 83 INCHES.**
- 2. THIS CHANGE HAS BEEN COORDINATED THROUGH THE US ARMY AIRBORNE AND SPECIAL OPERATIONS TEST DIRECTORATE AT FORT BRAGG. THIS CHANGE WILL BE INCORPORATED INTO THE NEXT REVISION OF THE SUBJECT MANUAL.**
- 3. POC FOR THIS MESSAGE IS ROGER HALE, DSN 687-4769 AND MSGT ALAN WAGNER, DSN 687-4757.**

### **NEXT MALFUNCTION REVIEW BOARD AND RIGGER BALL**

The next meeting of the Malfunction/Safety Review Board will be held 27 and 28 May 1998 at Fort Benning, GA. The 8th Annual Parachute Rigger Ball will be held 29 May 1998 in Columbus, GA. For additional information contact CW2 Marsha Billodeaux (706) 989-1343 or visit the website at <http://www.benning.army.mil>. RSVPs are required NLT 6 May 1998.

### **LIEUTENANT GENERAL JOHN J. CUSICK RETIREMENT**

A retirement dinner and retirement ceremony will be held 28 and 29 April 1998 for LTG Cusick at Fort Lee, VA. For additional information contact Roger Hale, DSN 687-4769.

### **NEW WEBSITE ADDRESS**

The new website address to access the Triannual Airdrop Review and Malfunction/Safety Analysis and other information has been changed. The new address is <http://www.lee.army.mil/quarter-master/adfsd>